

Cedar Falls Road Bridge
Spanning Flat River
East of U.S. Highway 67
Desloge Vicinity
St. Francois County
Missouri

HAER No. MO-49

HAER
MO,
94-DESL,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

HISTORIC AMERICAN ENGINEERING RECORD
CEDAR FALLS ROAD BRIDGE

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I. INTRODUCTION

Location: The bridge spans the Flat River 800 meters downstream from the Walker Branch and 600 meters east of Missouri Highway 67. The towns of Desloge and Cantwell lie immediately to the west. The bridge is in St. Francois County, Missouri

Quadrangle: Bonne Terre 7.5 minute series

UTM: Zone 15/4195520/7180650

Date of Construction: Bids were let in May of 1911. The construction was carried out from August to November of 1911.

Present Owner: St. Francois County, Missouri
St. Francois County Courthouse
Farmington, Missouri

Present Use: Vehicular traffic bridge to be replaced by new vehicular bridge in 1989.

Significance: The bridge is one of the few remaining examples of multiple-span Pratt through truss bridges in Missouri. Constructed by the still existing Stupp Brothers Bridge & Iron Co. of St. Louis, it is one of the few remaining unaltered examples of one of Missouri's master bridge fabricators.

Historians: Thomas Gage, PhD. American History
Craig Sturdevant, M.A. Anthropology
John Carrel, Research Associate ERC
Environmental Research Center of Missouri, Inc. (ERC)

II. HISTORY

A. NEED FOR THE BRIDGE

The bridge replaced an earlier structure at Herod's Ford. The low water crossing had become insufficient for the needs of the county.

B. CONSTRUCTION CHRONOLOGY

C. W. Francis, County Engineer, was assigned the task of locating a suitable site for the construction of a steel bridge across Flat River on the old Cedar Falls Road at Herod's Ford.

Bids were received for the construction of a single span or double span with or without supporting piers and abutments from 6 companies including Missouri Valley Bridge & Iron Co., Missouri Bridge & Iron Co., Stupp Bros. Bridge and Iron Co., Pan American Bridge Co., D. Heidleberg, and The Midland Bridge Co. Stupp Brothers proposed the largest selection of forms which included two 90 foot spans and sub and superstructure, one 180 foot span and sub and superstructure, two 90 foot by 16 foot with spans and superstructure only, and one 180 foot by 16 foot with spans and superstructure only. In each instance, the Stupp Brothers presented the lowest bid when compared to other companies offering one or two of the systems.¹

Stupp Brothers was awarded the contract for its low bid of \$3,890.00 for a double span with substructure and superstructure on July 6, 1911. A construction bond of \$5,000.00 was filed on August 4, 1911.

"The Stupp Bros. Bridge & Iron Co. files its Bond in the penal sum of \$5,000.00 signed by itself as principal and Geo. Stupp and Jul Stupp as surities for a faithful compliance with contract to construct two 90 ft.x16ft. steel spans on concrete abutments, across Flat River at Herod's Ford about three miles from Desloge."²

The bridge was accepted by the County following an on-site inspection of the bridge by the full County Court on November 9, 1911.³

III. THE BRIDGE

The Cedar Falls Road Bridge at Herod's Ford is a two span pin connected high Pratt through truss. Both spans are identical in construction and are 90 feet in length and 16 feet in width. Each have three panels.

The top chords and inclined end posts are of 10 inch plate over 6 inch channel iron braced with a ladder style attachment of 4 inch plates. The verticals are of the open lattice type. The diagonals are of 1/2 by 1 and 3/4 inch bars in a twin arrangement.

The counter bracing is of 1 inch by 1 inch square stock eye bars.

The top and bottom lateral bracing are of 1 inch round bar.

The bottom chords are of 2 inch by 3/4 inch eye bar and the portals and struts are formed of angle iron.

The deck is composed of wood over seven 8 inch I beam and two 8 inch channel stringers over 10 inch floor beams.

The substructure includes concrete abutments and a 21 foot high central concrete pier which tapers from a 22 foot by 5 foot base to 18 foot by 3 foot top.

The plaques on both portals include the following information:

1911
Built By
STUPP BRO'S
ST. LOUIS MO
John Marshall Pres. Judge
T. K. Barnett Associate
A. W. Kinzer Judges
A. Wulfert County Clerk
C. W. Francisco Engineer

The bridge does not appear to have been modified since its construction. Rust and stress have damaged the bridge to the point that it is no longer capable of supporting traffic demands. The bridge is to be removed and replaced by a new structure which will meet current and future traffic requirements.

IV. STUPP BROTHERS BRIDGE AND IRON COMPANY

The Stupp Brothers firm was begun in 1859 by John Stupp and reorganized by his sons, George and Jul, in 1904. The firm is one of the leading building material manufacturers in St. Louis today. The number of patented bridge types made by Stupp Brothers is unknown at present. Preliminary review of Missouri bridge records indicates that the company produced a wide variation in types, sizes, and lengths of bridges. This is reflected in the large number of systems included in the bid submitted by the company for the Cedar Falls Road Bridge in 1911.

V. FOOTNOTES

- 1 County Court Record, St. Francois County, MO
Thursday July 6th, 1911. Page 172.
- 2 County Court Record, St. Francois County, MO
Thursday August 10th, 1911. Page 205
- 3 County Court Rrecord, St. Francois County, MO
Thursday November 9th, 1911. Page 261.